

Remarks/ArgumentsRejections under 35 U.S.C. § 112

The examiner rejects a number of claims as unclear for a number of reasons. The primary purpose of the requirement for claim definiteness is “to ensure that the scope of the claims is clear so the public is informed of the boundaries of what constitutes infringement of the patent. A secondary purpose is to provide a clear measure of what the applicants regard as the invention so that it can be determined whether the claimed invention meets all the criteria for patentability and whether the specification meets the criteria of 35 U.S.C. § 112, first paragraph with respect to the claimed invention.” MPEP 2173.

The examiner’s focus during examination of the claims for compliance with the requirement of definiteness under 35 U.S.C. § 112, second paragraph, is whether the claim meets the threshold requirements of clarity and precision, not whether more suitable language or modes of expression are available. MPEP 2173.02. “When the examiner is satisfied that patentable subject matter is disclosed, and it is apparent to the examiner that the claims are directed to such patentable subject matter, he or she should allow claims which define the patentable subject matter with a reasonable degree of particularity and distinctness.” *Id.*, emphasis in original.

-A ‘substantially uniform coating’

The examiner contends that it is unclear whether the definition at paragraph 9 of the specification means that the phrase “substantially uniform coating” requires the uniformity of claims 23-27 or not.

-Response

Claim 1 does not require the uniformity of claims 23-27. The claims point this out with a reasonable degree of particularity and distinctness.

Paragraph 9 states that “[a]s used herein, a ‘substantially uniform coating’ refers to the interior surface being completely covered by a coating having a desired thickness.” Specification, pl. 2, ll. 16-17 (emphasis added). The sentence then defines a preferred embodiment. Namely, “a coating having a uniformity of thickness of about +/-20% or less of the desired coating thickness along its length.” *Id.* See Claims 23-27.

Claim 1 does not expressly specify a substantially uniform coating comprising “a coating thickness comprising a uniformity of about +/- 20% or less along its length.” Claims 23-27 do expressly add these specific limitations.

"[T]he presence of a dependent claim that adds a particular limitation raises a presumption that the limitation in question is not found in the independent claim." *Liebel-Flarsheim Co. v. Medrad, Inc.*, 69 U.S.P.Q. 2d 1801, 1810 (Fed Cir. 2004), *cert. denied*, 125 S. Ct. 316 (2004) (citations omitted).

Under the doctrine of claim differentiation, dependent claims are presumed to be of narrower scope than the independent claims from which they depend . . . [citations omitted]. That presumption is applicable in this case and has not been rebutted. If the dependent claims expressly recite "up to about 10%" silicon, then the independent claims, which must be at least as broad as the claims that depend from them, must include aluminum coatings with "up to about 10%" silicon.

*A. K. Steel Corp. v. Sollac*, 68 U.S.P.Q.2d 1280, 1286 (Fed. Cir. 2003). Where, as here, "the limitation that is sought to be 'read into' an independent claim already appears in a dependent claim, the doctrine of claim differentiation is at its strongest." *Liebel-Flarsheim Co. v. Medrad, Inc.*, 69 U.S.P.Q. 2d at 1811.

Based on the language in paragraph [9], the language found in the claims as originally filed, as interpreted in light of the doctrine of claim differentiation, the pending claims define the patentable subject matter with a reasonable degree of particularity and distinctness.

**-"At least about . . . micrometers or more"**

The examiner rejected claims 3-5, 30-33, and 65-67 on the grounds that the phrase "at least about . . . micrometers or more" was unclear. The claims have been amended in a manner believed to overcome the rejection.

**-Interior surface**

The examiner rejected claims 62 and 63 as unclear. The claims have been amended in a manner believed to overcome the rejection.

**-Claims 64-67**

The examiner rejected claims 64-67 on the grounds that it was "unclear what is the antecedent basis of the phrase 'said coating.'" The claims have been amended in a manner believed to overcome the rejection.

**Claims 68-72 and 74-84**

The examiner rejected claims 68-72 and 74-84 on the grounds that "it is unclear how these claims are compatible with a gaseous deposition product that comprises 'amorphous carbon coating,' as required by independent Claim 45. If these claims describe additional layers to the

amorphous carbon layer, it is unclear what is the claimed structural arrangement." Office action, p. 4.

**-Response**

Claim 68 has been amended to independent form and is believed to be allowable. Claims 69-72, 74-82 and 84 depend, directly or indirectly, from claim 68 and are allowable therewith. With respect to the structure of the coatings, at least in amended claims, Applicant directs the examiner's attention to Paragraph [0022] in the specification, which explains that "[a] wide variety of gaseous precursors may be used to form metallic or ceramic coatings, as well."

**CONCLUSION**

For all of the foregoing reasons, Applicant respectfully requests entry of the amendments and allowance of the elected claims. Upon allowance of a generic claim, Applicant respectfully requests consideration and allowance of claims to the additional species which depend from or otherwise require all of the limitations of an allowable generic claim. The Commissioner is hereby authorized to charge any fees in connection with this request, or to credit any overpayment, to Deposit Account No. 50-0997 (SwRI-2890-04), maintained Paula D. Morris & Associates, P.C.

Respectfully submitted,



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